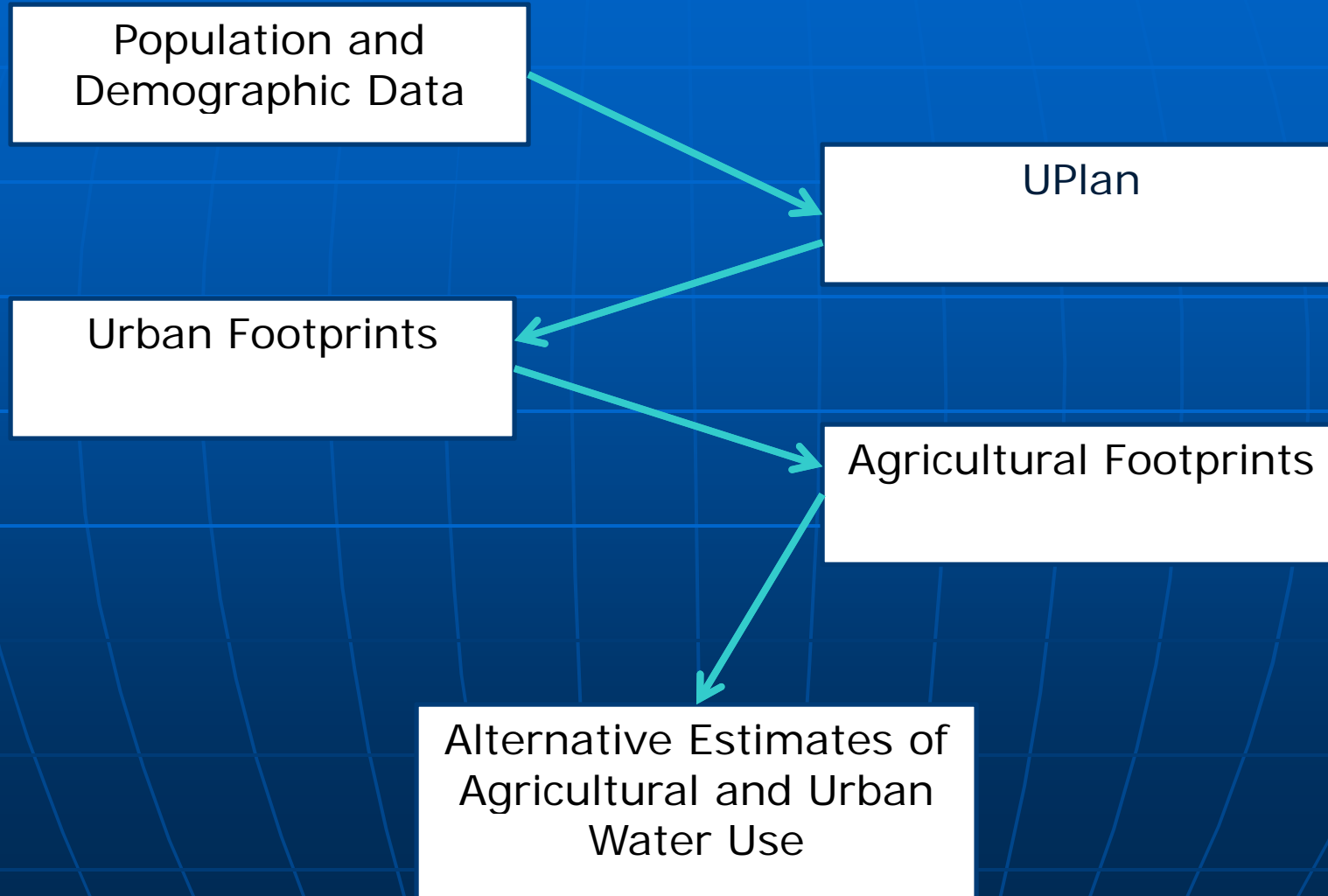


Developing Agricultural and Urban Landuse Footprints

Tom Hawkins
Integrated Data and Analysis Branch
Statewide Integrated Water Management
Department of Water Resources

Proposal



UPlan Demographic Inputs

Population

Infill Percentage

Persons Per Household

Housing Unit Percentages

Housing Unit Lot Sizes

Employees Per Household

Employees By Industrial, Commercial HD and
Commercial LD (As Percentages)

Building Square Footage per Employee by Ind, Comm-
HD, and Comm-LD

Floor-to-Area ratio by Ind, Comm-HD, and Comm-LD

Scenario Matrix

<u>Scenario #</u>	<u>Population Level</u>	<u>Density Level</u>
1	Current Trend	Current Trend
2	Current Trend	High
3	Current Trend	Low
4	High	Current Trend
5	High	High
6	High	Low
7	Low	Current Trend
8	Low	High
9	Low	Low

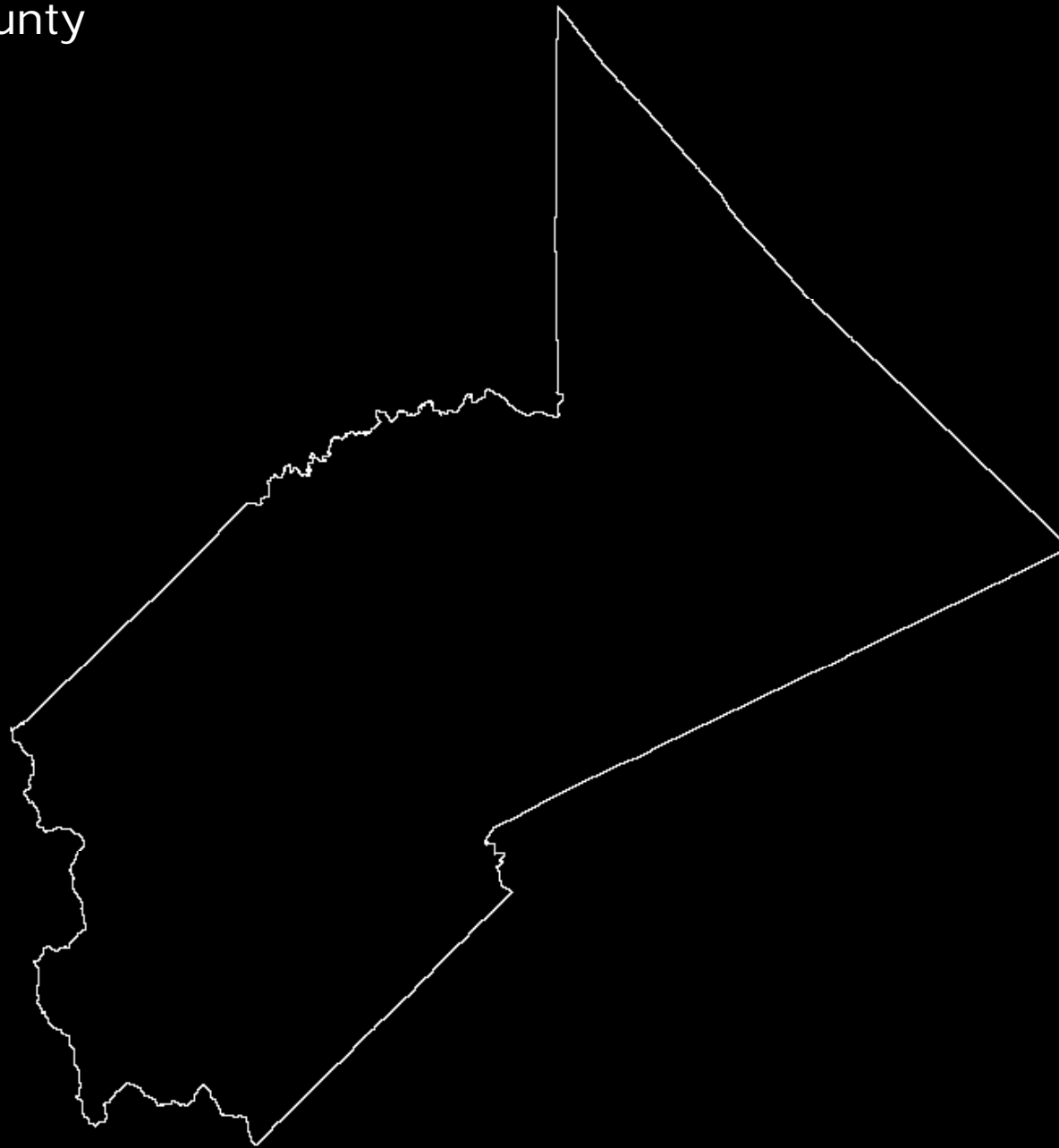
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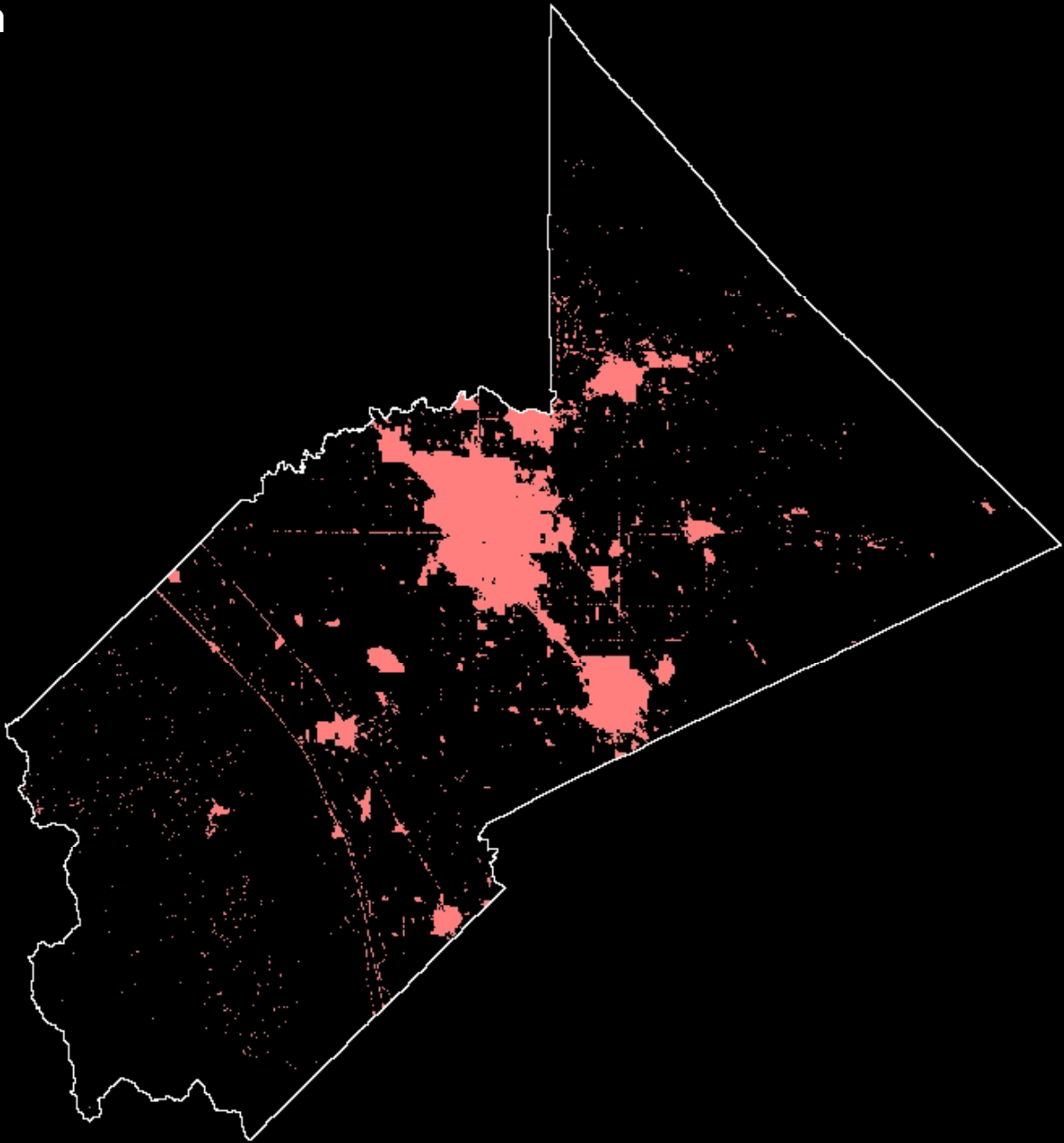
Examples

Use of Uplan and Demographic Data to
Develop Urban Footprints and Quantify the
Urbanization of Agricultural Land

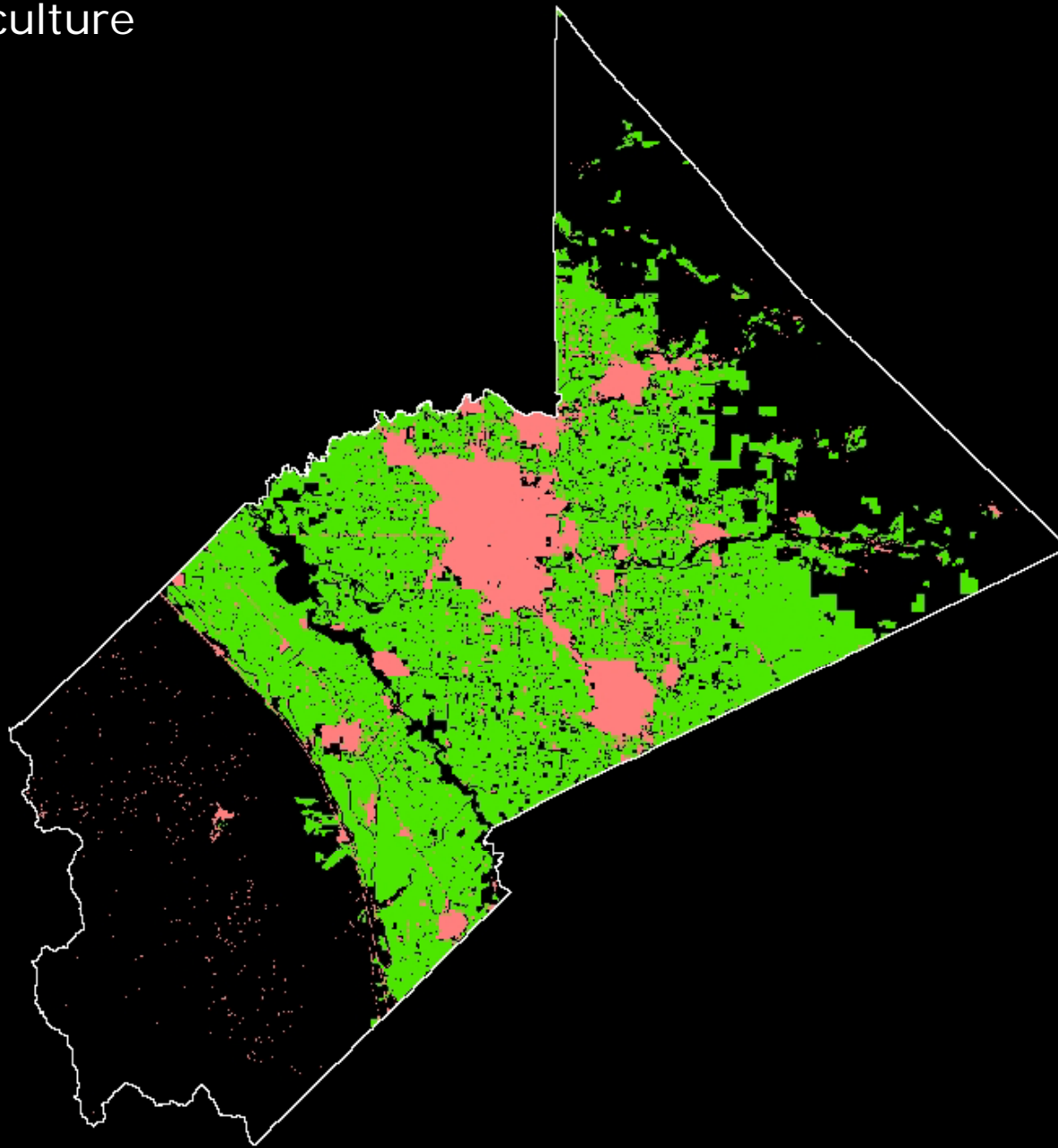
Stanislaus County



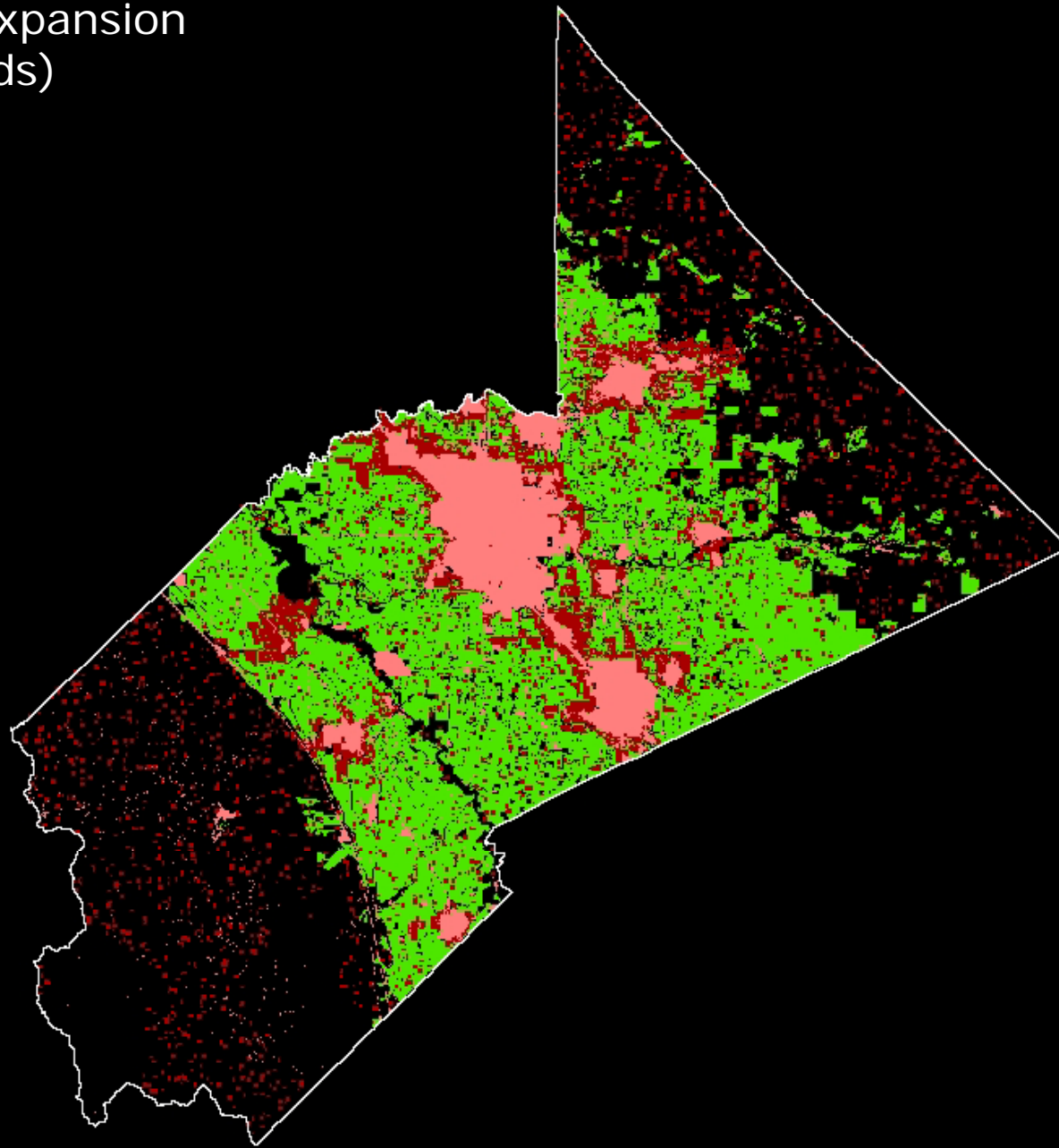
Existing Urban



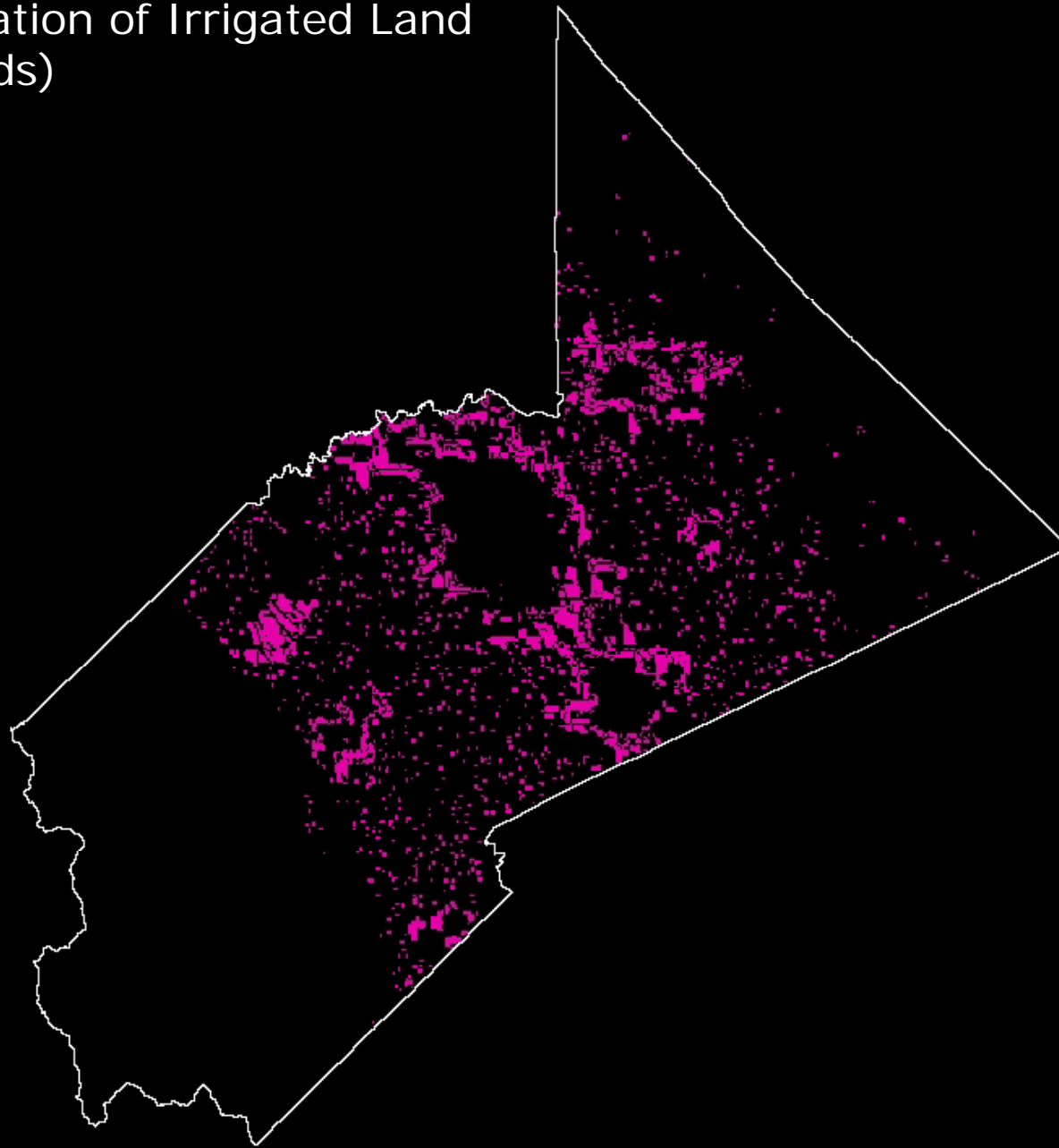
Irrigated Agriculture



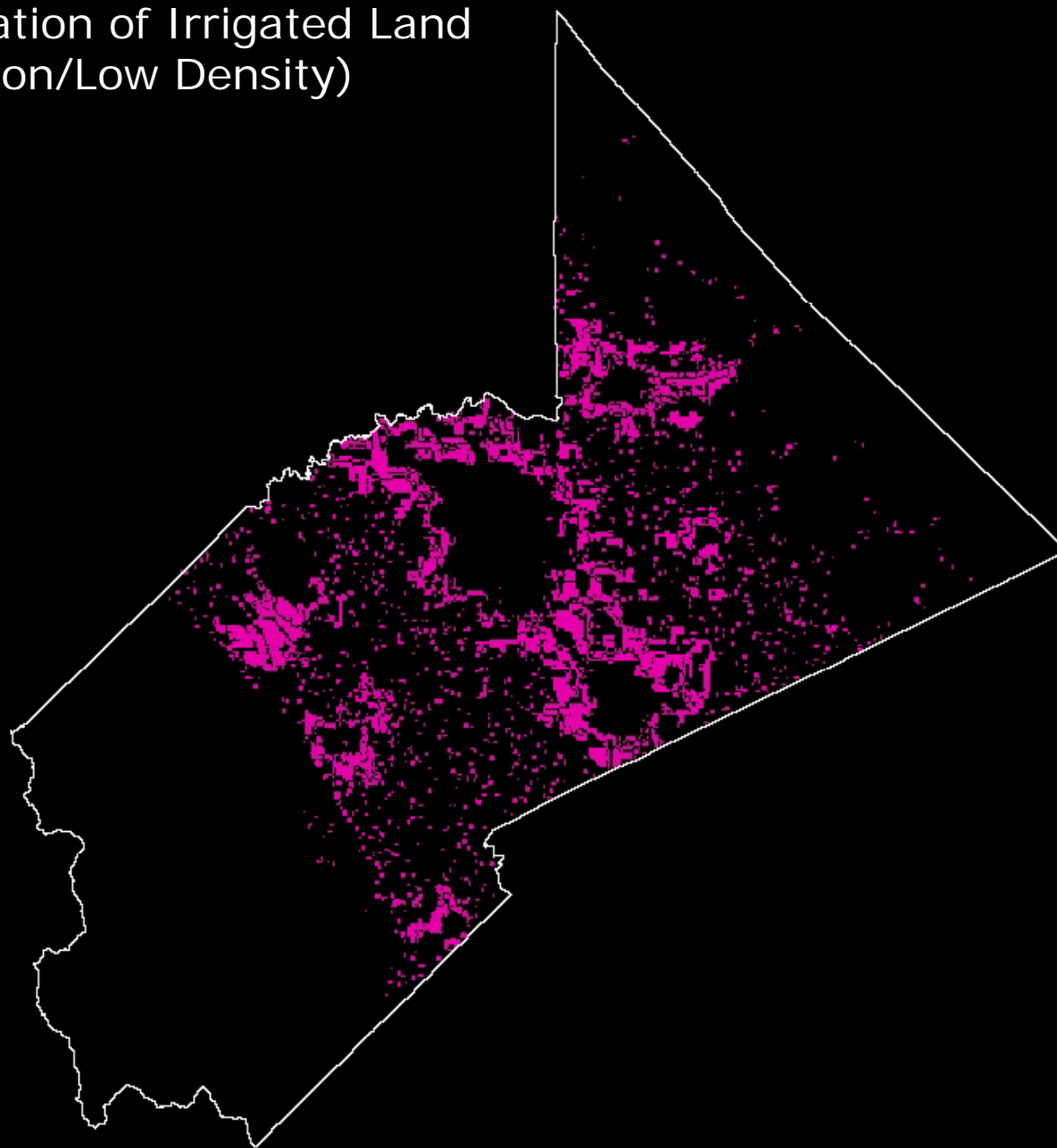
2050 Urban Expansion (Current Trends)



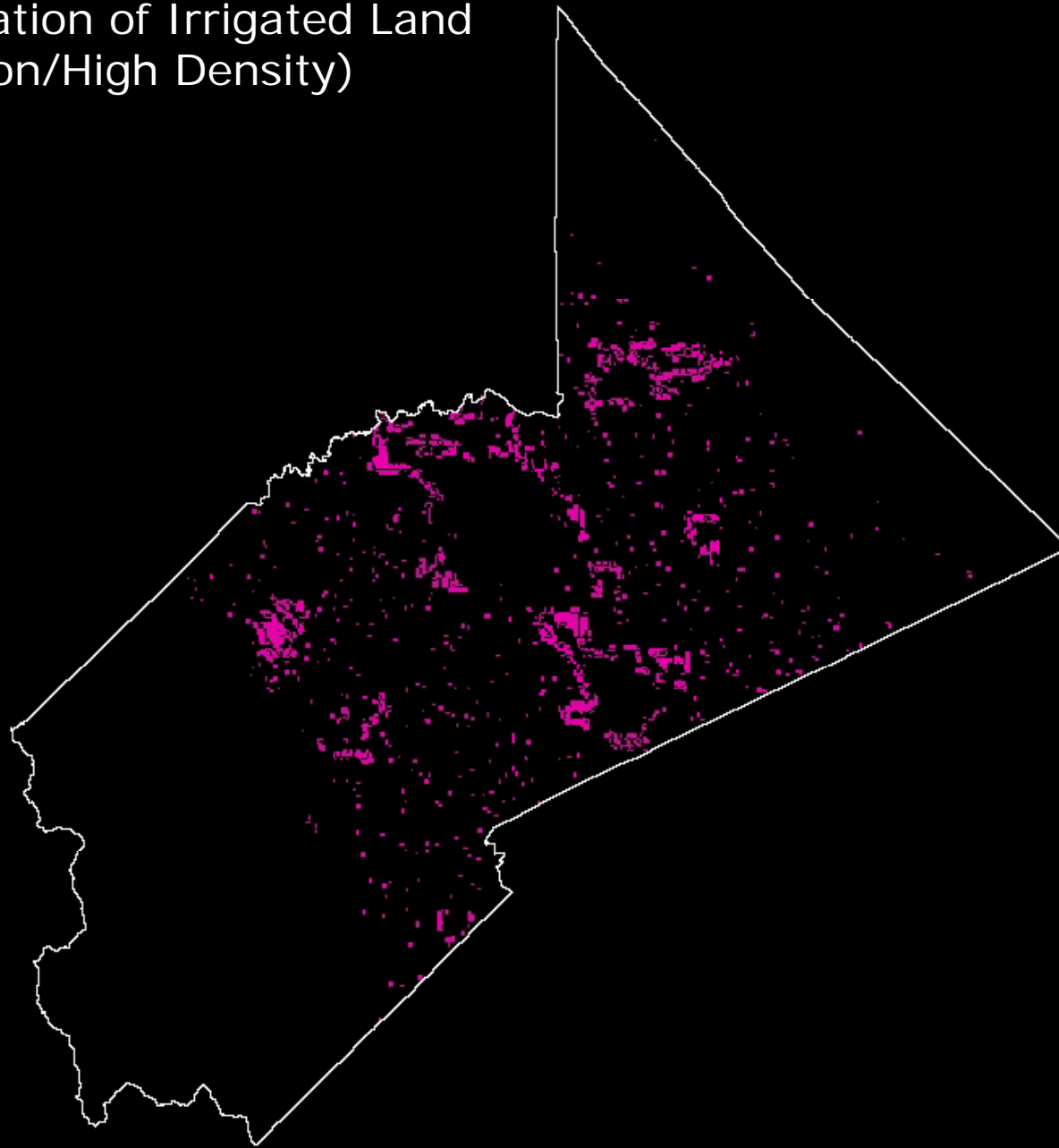
2050 Urbanization of Irrigated Land (Current Trends)



2050 Urbanization of Irrigated Land (High Population/Low Density)



2050 Urbanization of Irrigated Land (Low Population/High Density)



Results From Three Example Scenarios

Population	Density	New Urban	Irr Land Loss
CT	CT	60,399	42,224
High	Low	86,268	63,768
Low	High	32,043	22,617

High Population

15% higher than CT

Low Population

15% lower than CT

High Density

P/HH and MF Residential were 15% higher than CT

Low Density

P/HH and MF Residential were 15% lower than CT

UPlan Demographic Inputs


Current Trend Proposal

Growth Factor	Data Source
Population	Existing DOF 2050 Projection
Infill	Existing Percentages from "How We Will Grow"
Persons/HH	Existing DOF 2030 Projections
Housing Unit %	Existing DOF 2030 Projections
Housing Unit Lot Sizes	Existing UC Data for Standing Stock
Employees/HH	Existing DOF and Woods&Poole Estimates for 2030
Employees by Com and Ind	Existing DOF and Woods&Poole Estimates for 2030
Building SqFt per Employee	Existing UC Data for Standing Stock
FAR by Com and Ind	Existing UC Data for Standing Stock

UPlan Demographic Inputs

High and Low Population and Density

Population	Existing PPIC Estimates
Infill Percentages	?
Persons Per Household	?
Housing Unit Percentages	?
Housing Unit Lot Sizes	?
Employment Numbers	?



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